REMARKS

Please reconsider the application in view of the following remarks.

Information Disclosure Statement

Applicants note with appreciation the Examiners thorough consideration of the references cited in the Information Disclosure Statements (IDS) submitted on April 20 and September 26, 2006. Applicant notes that no copies of form PTO-1449 were attached to the February 4, 2009 Office Action and requests signed copies.

Claim rejection under 35 U.S.C. 103(a)

I. Claims 1-8

The rejection of claims 1-8 under 35 U.S.C.103(a) as being unpatentable over Sumitomo Bakelite Co., Ltd (JP2003-033991/ hereinafter referred to as Sumitomo) in view of Matsushita Electric Industrial Co., Ltd (JP2002-365624/hereinaficr referred to as Matsushita) is respectfully traversed.

In the Office Action, while the Examiner admits that Sumitomo discloses a plastic substrate for a liquid crystal display device having glass cloth impregnated with an epoxy resin, the Examiner determines Sumitomo does not teach the ratio of file claimed elastic modulus. Regarding the ratio of the elastic modulus, the Examiner takes the position that Matsushita assumably teaches the claimed elastic modulus ratio, saying *"Matsushita teaches forming the resin sheet such that the ratio of glass fibers to resin is such that the sheet stays firm during the*

manufacturing process, for the benefit of enhancing alignment (paragraph 6). Matsushita teaches general elasticity values of glass fibers and common epoxy resin (paragraphs 3-6). In view of these values, the range of values disclosed would read on the claimed elastic modulus ratio."

The Examiner above is improperly construing the teachings of Matsushita. Matsushita neither describes all optical resin sheet comprising a cured resin layer containing glass fiber, nor teaches the claimed elastic modulus ratio.

More specifically, the elastic modulus ratio of glass described in Matsushita is not the elastic modulus ratio of "glass fiber" contained in a cured resin layer, but the elastic modulus of "a glass substrate." In addition, this glass substrate is regarded merely as a conventional art in Matsushita.

That is, Matsushita refers to the elastic modulus ratio of a commonly used resin substrate and the elastic modulus ratio of a conventional glass substrate in order to demonstrate the fact that because the elastic modulus ratio of the resin substrate is smaller by one digit than that of the conventional glass substrate, the liquid crystal display is curved (cf. Matsushita., paragraphs [0002]-[0007]).

It is apparent from the above that not only the elastic modulus of the "glass fiber" but also the teaching of positioning the "glass fiber" in a cured resin layer are not disclosed in Matsushita.

Matsushita describes in the paragraph [0013] that resin containing the "glass fiber" is used in Example 1, however, this resin is used to be printed on a peripheral portion of the substrate and used to seal the liquid crystal, and thus is not used to constitute the substrate itself.

Thus, it is respectfully submitted that the Examiner is misunderstanding the teachings of Matsushita because Matsushita neither teaches nor suggests the "elasticity values of glass fibers" and the "elastic modulus ratio."

Furthermore, neither Matsushita nor Sumitomo teach or suggest any advantageous effects of the present invention. Specifically, the present invention produces an excellent advantageous effects, namely an advantageous effect that the ratio of the elastic modulus of the glass fiber to the elastic modulus of a cured resin material is not less than 25, thereby preventing the light leakage in an oblique direction of the liquid crystal display.

Such an advantageous effect is apparently shown in the experimental results of Examples in the present specification (for example, Table 1). That is, all of the Examples and the Comparative Examples employed in the experiments adopt the combination of "glass fiber / epoxy resin". Of them, Examples 1-3, in which the ratio of the elastic modulus of "glass fiber / epoxy resin" is 25 or more, show light leakage in the oblique direction of a liquid crystal display to be "Nil", while the Comparative Examples 1 and 2, in which the ratio of the elastic modulus of "glass fiber / epoxy resin" is less than 25, show the light leakage to be "observed."

It is known that the combining the glass fiber to the epoxy resin can enhance the strength and reduce heat expansion, however, it is not known to prevent the light leakage in an oblique

direction of the liquid crystal display by setting the elastic modulus ratio at a predetermined ratio. This is a significant effect which has first been found out by the present inventors.

It is a matter of course that neither Matsushita nor Sumitomo disclose such advantageous effect. Thus, a person of ordinary skill in the art could not attain the present invention by any combination of Matsushita and Sumitomo, and therefore, the present invention is not obvious in view of Matsushita or Sumitomo, and therefore the Examiner's rejection on these claims should be withdrawn.

II. Claim 1

The rejection of claim1, under 35 U.S.C,103(a) as being unpatentable over Sumitomo Bakelite Co., Ltd (JP2003-033991 in view of Takahashi (JP2005-283698A/ hereinafter referred to as Takahashi) is respectfully traversed.

Specifically, Takahashi was published on October 13, 2005 and this publication date is after the priority date of the present application (October 23, 2003) and the filing date of PCT Application (August31, 2004).

Therefore, Takahashi is not qualified as prior art under 35 U.S.C.103(a), and the rejection should be respectfully withdrawn.

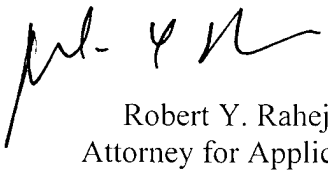
Conclusion

The Claims have been shown to be allowable over the prior art. Applicants believe that this paper is responsive to each and every ground of rejection cited in the Office Action dated February 4, 2009, and respectfully request favorable action in this application. The Examiner is invited to telephone the undersigned, applicants' attorney of record, to facilitate advancement of the present application.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



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